

DOCTOR WHO

SERIAL X

THE ARK

by PAUL ERICKSON
and LESLEY SCOTT

An Adventure in Space & Time





An Adventure In

~ SPACE AND TIME ~

Editor.....Gary Hopkins
Art Supervisor.....Stuart Glazebrook
Design Editor.....Deanne Holding
Cover.....Andrew Martin
Artwork "23-03".....Stuart Glazebrook
Distribution....'CyberMark Services'

Writers this issue....Jeremy Bentham
Gary Hopkins
Trevor Wayne

'DOCTOR WHO' copyright.....BBCtv
'CMS' copyright.....Jeremy Bentham

'SPACE AND TIME' devised by
Tim Robins and Gary Hopkins
Editorial address...15, Coverack Road
Newport
Gwent
NPT 00S

All material contained herein is the copyright of the respective author and artist. No attempt is made to supersede the copyrights held by the British Broadcasting Corporation.

Oodo is the first to leave the safety of the TARDIS, believing it to have arrived at Whipsnade just outside London. The presence of creatures like chameleons, monitors and an Indian elephant tends to support her argument, but the Doctor soon deduces they have arrived aboard a gigantic space vessel in the far-distant future. The appearance of one-eyed reptiles called Mandroids confirms this, and the travellers are brought before those in charge, a group of humans called Guardians. The Guardian Commander accepts the travellers as friends and explains that the ship is carrying the human race to a new planet, Refusis Two, as the Earth is soon to plunge into its own sun. The journey to Refusis will take another seven-hundred years to complete, and the human race has been miniaturised into micro-cells for transportation. Oodo likens the ship to the Biblical Ark, as it carries samples of every Earth creature. The Mandroids, however, are friendly servants of the humans, who came to Earth many years before when their own planet was dying.

Oodo has a cold, and the germs from this infect the humans and Mandroids who have no immunity to them. Thus, it quickly develops into epidemic proportions, and the Doctor and his friends are accused by the more hot-headed Guardians of being Refusian spies. As the virus spreads, the TARDIS travellers are made to stand trial, presided over by the deputy Commander Lenton. Steven tries to protest their innocence, but he too has become infected by the virus and falls gravely ill. Having heard Steven's plea, the Commander rises from his sick-bed to intervene in the trial, aided by his daughter Mallium. In accordance with Steven's wishes, he orders the release of the Doctor, who will be made responsible for finding an antidote to the virus. With the help of the Mandroids, the Doctor quickly develops a serum, which he tests on Steven. The antidote works, the humans and Mandroids are saved, and the Doctor, Steven and Oodo are allowed to leave in the TARDIS.

The travellers are surprised when the ship rematerialises aboard the Ark, seven-hundred years in the future. They are even more surprised to find the once servile Mandroids are now in control. As the Ark approaches Refusis the Mandroids prepare to descend to the planet, determined that it will become a "Mandroid world". The Doctor and Oodo are sent down to the surface of Refusis as a forward landing party to test for danger. They realise that the planet's inhabitants are invisible, their physical beings having been destroyed by solar flares, but that the Refusians are nevertheless peaceful and intelligent. Unaware of this invisible threat, the Mandroids prepare to evacuate the Ark, leaving behind a fission bomb - concealed within the head of the Ark's part-human part-Mandroid statue - to dispose of the humans once and for all. Meanwhile, Steven has persuaded the human survivors to rebel against the Mandroids and find the bomb before it is too late.

On Refusis disagreement within their ranks causes the Mandroids to fight each other, and the additional struggle with the humans weakens them into submission. Back aboard the Ark, a Refusian uses its phenomenal mental power to lift the statue (still containing the bomb) into the Ark's launching bay, from where it is ejected harmlessly into space. Assured that the humans and Mandroids will live peacefully together on Refusis, the Doctor, Steven and Oodo return to the TARDIS.

As the ship travels on through space and time, something very odd happens. Steven and Oodo watch as the Doctor fades from sight. Perhaps, suggests Oodo, this is something to do with the Refusians. The Doctor doubts this, his diswooded voice replying: "You're wrong, this is something far more serious. We're in grave danger. This is some form of attack!"

DRAMA

EXTRACT



Baccu, the prosecutor, approached Steven's cage, then turned to address the assembly. He was a born orator and when he spoke it was in a voice that defied opposition. "My contention is that it was no accident that this disaster has happened. I say that you intentionally came here to spread the disease."

"Look, that's utter nonsense."

Baccu paused and waited for Steven's outburst to finish. Happy that it had he continued. "I maintain that you are agents of the planet towards which this spaceship is proceeding; that you came here to destroy us!"

"Why? We're human beings like you are. Why should we?"

"And there is the crux of the matter." It was Zentos who spoke. "Do you expect us to believe that nonsense? That you managed in that ridiculous machine called the TARDIS to travel through Time? Guardians, Monoids, these beings, or whatever they are, they place a heavy strain on our credulity."

Steven closed his eyes and leaned against the bars of his cage. He felt weary and the constant uphill effort to convince Zentos of their good intentions was finally getting to him. He took a deep breath and squared up again to the Commander-elect. "Well that's not very difficult," he began. "If your medical records are anything to go by this segment of time, far from being one of the most advanced in knowledge, is one of the worst."

"We can cope with all things known to the 57th Segment of Time, but not with strange diseases brought by you as agents of the intelligences that inhabit Refusis."

"You're still on about that? I told you before, we know nothing of that planet."

"My instinct, every fibre of my being, tells me differently."

The young astronaut nodded. The room was intolerably hot now and around him the voices and faces of the Guardians and their Monoid servants were merging and melding into a haze of light and sound which seemed to be receding down an ever-lengthening tunnel. Yet through all this Steven could still find the strength to fix Zentos with a look almost of pity. For all his new-found powers of command Zentos was nervous and edgy. Fighting back the waves of dizziness Steven raised his voice for one last try.

"That, unfortunately, tells me only one thing..."

"What is that?"

"That the nature of Man, even in this day and age, hasn't altered at all. You still fear the unknown like everyone else before you."

Zentos was still defiant. "That won't stop me from coping with it."

"How?" said Steven. "By destroying us? By ejecting us into space?"

"If that is the voted finding of this hearing, yes."

Manyak, the Guardian who had elected to defend the travellers stepped forward. "Steven, prove to us your good faith. Would your friend, the Doctor, have any knowledge how to deal with this fever?"

"Yes, he probably would," replied Steven, "if you'd let him out of that cell so that he had a chance to experiment."

At once Zentos was on his feet, but the prosecutor was faster. "Yes, of course he would," accused Baccu. "You would love that, and by such means spread the fever even further and faster; perhaps even kill one of the Guardians."

"Are we to be fooled by such tricks?" cried Zentos. At the almost universal response of yes Steven felt the last of his strength draining away, and as the tirade continued he slowly slumped to the ground.

"Are we to be taken in by such nonsense just because these creatures have the outward appearance of human beings? They are our enemies, they should be punished!"

STORY REVIEW

Trevor Wayne



The most obvious weakness in 'The Ark' is revealed in the very first shot. A scaly, blonde, "Beagle-wigged" creature turns around to stare at the camera with its one cyclopic eye set in an otherwise featureless face. This should have been terrifying (as Steven later, unconvincingly, describes them) but again the element of surprise had been lost by the use of these unimaginatively named Monoids in the press publicity for the new girl, Dodo. Most of the first episode is disappointing; the greatest part of the dialogue uttered by the series' regulars is a trite continuation of the banal scene that had closed the previous story. Dodo won't accept the possibility that she is no longer on the Earth. Whipsnade Zoo seems a much more likely location. When compared to her earlier lack of concern at the obvious dimensional contradiction of the TARDIS it seems a very poorly edited part. However even the Doctor is a bit slow on the uptake at the outset of this story. It takes him a long time to realise that there is a "steel sky" over his head, and that the ground beneath his feet is throbbing with the vibration from some machine - most likely, as he reasons, the engine of a gigantic spacecraft.

This spacecraft, on its fascinating voyage - taking the remains of humanity, and the Monoids who had earlier left their own doomed world, away from the dying Earth - soon becomes a very real place. The sets, although obviously not very expensive, are nevertheless convincing.

We are now in the fifty-seventh segment of time - that is, ten million years into the future. Most of the population of Earth and the Monoids have been miniaturised and placed in suspended animation for the seven-hundred-year voyage to the planet Refusis, where the two species hope to set up home. Most of the first episode is taken up with scenes that establish the background against which the action of the subsequent episodes is to take place. Thus the pace of episodes two to four is rapid and exciting. Characterisation is sacrificed in favour of action. The Commander of the Ark, his daughter Mellium and the suspicious authoritarian Zentos, who all appear in the first two episodes, are the best drawn characters, but even they are rather one-dimensional.

Interestingly, the threat to humanity in this story has been brought unwittingly by the Doctor himself; Dodo's cold. This highly contagious virus sweeps through both the Monoid and human populations and gains in its intensity so that even Steven, who possesses normal immunity to the usual effects of the common cold, becomes severely ill. But apart from a reduced immunity to disease mankind seems to have changed little in ten million years. When the arrival of the time travellers is first reported the Commander asks if it could be anything to do with the Monoids; they are used for the most menial tasks by humans but are still not trusted. There is a show of equal treatment, interpreters are seen translating speeches into sign language for the deaf Monoids, but the Commander, who is shown to be a generally fair-minded man, does not altogether trust them. This, and the fact that the Doctor realises the Monoids are a lot more intelligent than their appearance and apparent ability indicate, are pointers to the trouble coming to the Ark in the future.

The plague takes hold of the crew of the Ark, the human Guardians are deeply concerned that their vital mission is being jeopardised - they suspect our heroes of being spies for the Refusians (what were they intending to do when they got to Refusis and the natives were unprepared to surrender their world to the newcomers?) - many Monoids die, but only when one of the humans perishes do the Guardians determine to execute the time travellers.

Eventually the Doctor is allowed to find a cure. In keeping with the rapid pace of the serial several times in episode two a scene is cut in mid-dialogue, usually some scientific explanation that the writers did not feel confident enough to put in in full or that there simply wasn't time for. One of the most striking scenes comes towards the end of part two when Dodo runs into the control room overjoyed that the virus is abating.

Her enthusiasm spreads even quicker than her cold had, but the rejoicing is cut short by the disturbing sight on the scanner of the Earth ablaze in its final moments, plunging into its sun and oblivion. An image that lingers for years afterwards in the mind of the viewer.

When the TARDIS returns to the Ark seven hundred years later, there is another splendid scene when the travellers see the completed statue with its Monoid head looking like a pagan idol - loaded with Old Testament menace. Some very effective incidental music reinforces the change in the situation aboard the Ark.

The Monoids are still the weakest thing about the second half of the story. We are shown the Guardians waiting on the Monoids, but how do they eat and drink without mouths? They move slowly and don't even have names, just numbers. However, the direction in the final episode, where the two factions of the Monoids fight on Refusis, is excellent. By carefully filming the same actors dressed as Monoids several times the impression of a large number of these creatures is successfully given.

With the aid of the invisible Refusians, with their godlike disembodied voices, the Doctor is able to redress the balance upset by the plague and apathy of the Guardians, and when he leaves for the second time it seems that Humanity, the Monoids and the Refusians are going to co-exist peacefully.

'The Ark' is a very successful 'Doctor Who' story. It has monsters, morality and adventure, and ended with an optimistic message. Perhaps the Monoids weren't the best of the Doctor's foes, but then they weren't real villains. Perhaps, with their atrophied senses, they were supposed to be some sort of allegory for human weakness. We had come to expect monsters to behave badly - as the Monoids did - but their human counterparts were also shown to be far from perfect. This story indicated that the Doctor was once more back on course. However, it must be said that Dodo made no real contribution to the serial except to carry the cold to the Ark; and again Steven was excluded from the main action, firstly by passing out and then by being left behind when the Doctor and Dodo were taken to Refusis.

One welcome return to the series was a "cliff hanger" ending to the story to draw the viewer into the next adventure. At the close of 'The Ark' the Doctor has become invisible. It is, he affirms, a form of attack, but the nature of this attack will only be discovered in the next episode..."The Celestial Toyroom".



SPACE and TIME FLASHBACK



(ABOVE) Guardians and Monoids watch the Doctor and his friends via a viewing screen, shortly after the arrival of the TARDIS.



(LEFT) Zentos (Inigo Jackson), Deputy Commander aboard the newly-named 'Ark', questions Steven and accuses the three travellers of being Refusian spies.

(RIGHT) As the deadly virus spreads throughout the Ark, several Guardians look on as the funeral of the plague's first casualty begins. The shrouded corpse of a Monoid is placed reverently into the transporter car, ready to be taken to one of the launching bays for his burial in space.





(LEFT) The transporter car, driven only by Monoids and used for the conveyance of passengers and cargo. Towards the end of episode two it carries the Doctor, Steven and Dodo on the long journey through the jungle and back to the TARDIS.

(RIGHT) Following the revolution aboard the Ark, Monoid One discusses his plans with a subordinate. "We will land there. We will create a Monoid world." About their necks the Monoids wear artificial voice boxes. The Monoid standing beside One carries a weapon known as a "heat prod".



(LEFT) Stranded on the planet Refusis, after the destruction of the launcher that brought them there, the Doctor and Dodo discuss the situation with an invisible Refusian. Although they have no need of physical comfort, existing only in mental form, the Refusians have built cities in preparation for the arrival of the Ark.



THE MONOIDS

GARY HOPKINS



Like the Zarbi of the previous season the Monoids first appear in the opening moments of 'The Ark'; and had it not been for the attention given to this serial by the press their appearance might have been all the more striking.

It soon becomes clear that the Monoids are nothing more than servants of the Guardians aboard this vast ship, although the human Commander insists a bond of friendship exists between the two species. The Monoids

had come to Earth many years before when their own planet was dying and they were forced to seek sanctuary. In exchange for the hospitality of the humans the Monoids offered their "invaluable services", wishing also to accompany the humans on their long journey to Refusis Two when the Earth itself neared its destruction.

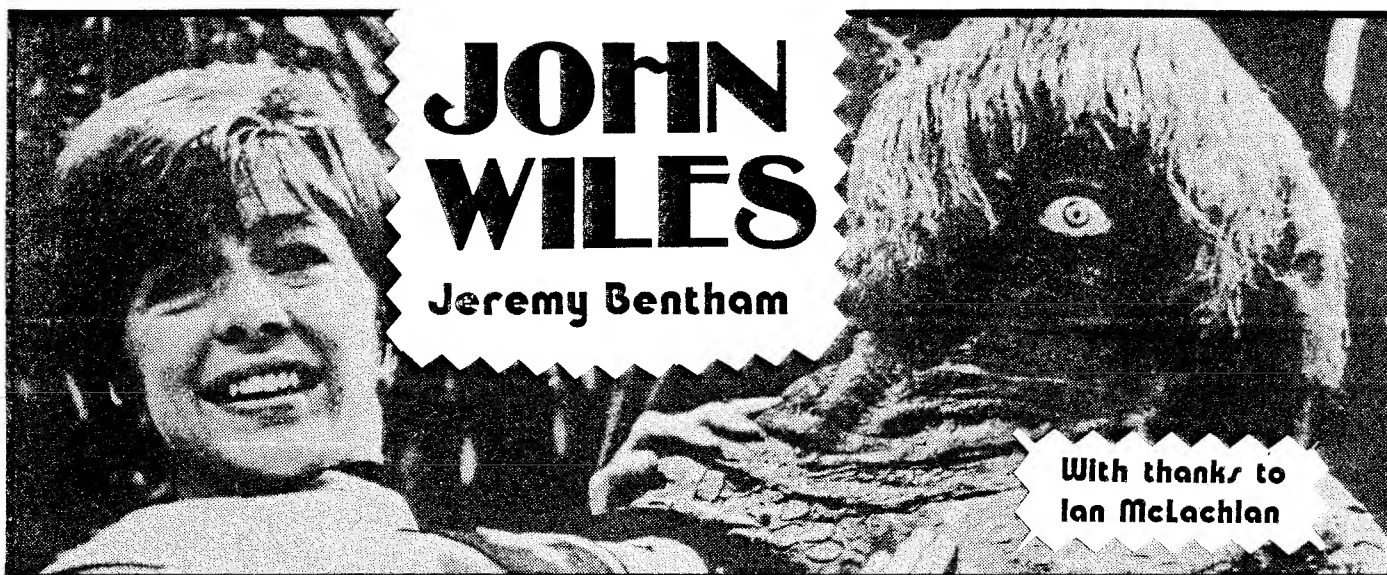
Since then the Monoids have served the Guardians of the human race faithfully, and have become a vital part of the continuance of the journey. Their duties include organising patrols of the forest (where they find the Doctor and his companions) and the maintenance and piloting of the ship. Consequently the Guardians have become more dependent upon these reptilian creatures, little realising the true extent of their intelligence and growing resentment.

The Doctor is the first to suspect the Monoids when he remarks, "You're far more knowledgeable than most people realise." Despite this, even he doesn't foresee the time when they will grow in strength sufficiently to overthrow the humans. They seem outwardly passive and ready to serve the Guardians without question. Although they have no verbal means of communication, they have instead developed a simple sign language, later made obsolete when they gain the power of speech. For the moment, however, they show no definite signs of an aggressive nature, and only their appearance seems to unnerve those strangers with whom they come into contact.

The Monoids display a further weakness when the virus infection, caused by Dodo's cold, spreads throughout the ship. Although both humans and Monoids are affected equally, it is a Monoid who is the first to die from the virus. The Doctor now witnesses another example of Monoid culture as several of them bear the shrouded form of one of their dead to his burial in space. The funeral cortege is accompanied by the slow beat of a drum, adding a touching note of genuine sadness to the character of these creatures.

By the time the Doctor and his friends return to what is now called the Ark - seven hundred years on - there has been a revolution and the Monoids are now the over-lords. As the Monoid leader explains, the Doctor's cure for the virus was but a temporary respite. A mutation of this fever subsequently developed and sapped the energy of the humans. He adds that the main reason for the revolution was the stupidity of the Guardians. "They were a simple people. They actually encouraged the research from which we developed our voice boxes and heat prods. They were totally unprepared for the conflict when it came."

The Monoids quickly prove themselves to be tyrannical rulers, ruthlessly suppressing the handful of human survivors and planning ahead to their destruction. At the same time, however, distrust grows within the Monoid ranks, finally giving way to disorder and chaos when they encounter the invisible Refusians on Refusis Two. Those who had once been slaves and who became rulers were now slaves again. As the Refusians emphasised, though, they would only allow the humans and Monoids to remain on Refusis as long as they could achieve peaceful co-existence.



JOHN WILES

Jeremy Bentham

With thanks to
Ian McLachlan

Very few Producers have had as rough a ride on 'Doctor Who' as John Wiles. He joined the series proper with 'The Myth Makers' (Serial "U") after a long period of time 'trailing' his predecessor. Yet he left just four stories later, handing over to Innes Lloyd at the end of 'The Ark', although the majority of the groundwork for 'The Celestial Toy-maker' (Serial "Y") was also his.

Looking back on his career with 'Doctor Who' now John Wiles tends to give the impression of being in the right place at the wrong time. His accession from in-house Script-editor to Producer came about on the authorisation of Head of Drama, and at the time was only the second instance of this happening within the Drama Department of the BBC. Previous to this only Irene Shubik had made so rapid a jump, also into the field of science-fiction, and as with any cases of promotion on this scale there were elements of resentment from those used to a more traditional system.

John Wiles inherited 'Doctor Who' from Verity Lambert, and so successful had been her reign that the directive handed to John Wiles was to continue the series as it stood and not to "rock the boat". The show was still aimed towards the older end of the children's market, even though audience research had shown the increasing level of adult interest in the two-year-old series.

These operating parameters at once clashed with John Wiles' own background as a writer, where creative freedom is a much sought after value, but he accepted the post after speaking with Alan Bromly and Morris Barry, both of whom had entered Production having started out as Directors.

This is not to say John Wiles did not make his mark on the series. He did and became known to those who worked with him as something of a "hawk" Producer. Along with his Script-editor - the very flamboyant Donald Tosh - John Wiles intended to style 'Doctor Who' away from the bland rut he felt the series had fallen into after its overnight success with the Daleks. Two things in particular he aimed to change. Firstly, it was his view that the scripts lacked degrees of sophistication. Far too many of them were straightforward period pieces or space operas dealing more with events than people. John Wiles explains, "We were trying to edge ourselves towards some of the ideas now done by 'Star Trek'". This did not necessarily imply making the show more adult, but certainly more widely encompassing.

The second change he wished to make was a veering towards serious attitudes to death. Audiences, John Wiles felt, were becoming too blasé with the sight of characters snuffed out by blasts from ray guns - they needed reminding that death was a very tragic event and should be shown as such. Finding sympathetic ears with Donald Tosh and director Douglas Camfield, two stories in particular accentuated this new approach: 'The Daleks' Master Plan' (Serial "V") with its catalogue of slaughter on both sides, and 'The Massacre' (Serial "W"), which asked

the viewers to ponder on the fates of the Huguenots and especially of Anne Chaplette.

This latter change John Wiles was only able to foist upon the cast of 'Doctor Who' with great difficulty and right from the start he ran into head-on clashes with the show's star, William Hartnell. The close-run departures of Verity Lambert, Dennis Spooner, William Russell, Jacqueline Hill and Maureen O'Brien left Hartnell deeply upset and he began regarding himself as the last bastion of the 'Doctor Who' series as it should be done, e.g. with a "twinkle in the eye". Where serious disagreements arose Hartnell was not above going over the head of John Wiles to the new Head of Drama, Gerald Savory and he, being new to the job himself, allied more with the conservative side of the series, as typified by Hartnell, than with the progressions advocated by Wiles.

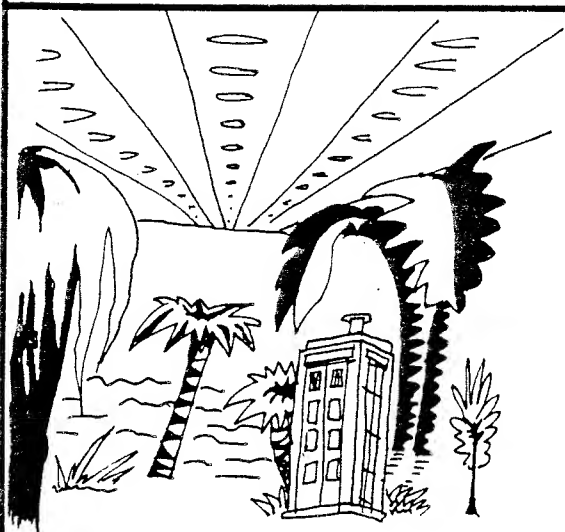
For the main the two agreed to compromise but it still left growing doubts in the mind of John Wiles that he was contributing nothing to the series - that he was a caretaker Producer and little more.

Matters were not helped by the massive problems posed by 'The Daleks' Master Plan'. Unlike almost every other 'Doctor Who' serial it was not commissioned by the Producer or the Script-editor. Both Wiles and Tosh were working to the instructions of Huw Weldon (see 'Mission to the Unknown' - page "19-09") and churning out a thirteen week Dalek epic. Neither of them would have chosen the story themselves but, being stuck with it, they had to interrupt their own storylines and work through the enormous script and technical problems posed by the concept.

Neither were things helped by the gradual decline in ratings 'Doctor Who' suffered in the wake of 'Master Plan'. The beautifully-scripted and lavishly-costumed serial 'The Massacre' was poorly received and was felt to offer little competition to 'Thunderbirds', which was being screened opposite 'Doctor Who' in many regions. Despite being very pleased with 'The Massacre' himself John Wiles had to bear the brunt of the displeasure felt "upstairs", that straightforward history had no place any more in 'Doctor Who'.

Towards the end relationships became very strained in the Production Office and few regrets were expressed when John Wiles submitted his resignation, to be followed shortly afterwards by Donald Tosh - an act of loyalty on the latter's behalf which John Wiles felt was unnecessary.

The final irony, though, was that the departure of Messrs Tosh and Wiles came just as the finishing touches were being applied to the one story which brought out all the qualities the pair had tried to inject into 'Doctor Who'. With some help from incoming Script-editor Gerry Davis, Brian Hayles completed a story which, although done on a small budget, has stood the test of time and is regarded, even by people high up in the BBC, as a true 'Doctor Who' classic - 'The Celestial Toymaker'...



Technical Observations

For his last show as Producer of 'Doctor Who', John Wiles went all out and used his budget to create a very expensive-looking four-parter. Much of the credit for the glossy effect achieved goes to designer Barry Newbery whose carefully planned sets helped the show attain its necessary large-scale look. However, ingenious sets aside, the show did run heavily over budget in the final assessment and in consequence savings were made on the following show - Serial "Y".

A large provision of funds was set aside to cover the cost of making the eight Monoid costumes. The basically one-piece costumes were surmounted each by a Beattie-style wig through which the artist saw out. The single eye was thus on a parallel with the actor's mouth and one of the costumes had the eye backed with a peg, thus by moving his tongue, the actor could make the eye tilt and turn to simulate natural movement. For the first two episodes the Monoids were "naked". When they gained the power of speech in episodes three and four they dressed with a rigid collar which both denoted their rank - in the form of numbers - and supported their voice boxes. The Monoids were also equipped with heat guns: long, rod shaped working props which ejected a puff of white powder on cue.

Writers for the serial, Paul Erickson and Lesley Scott, were married at the time of penning this story. They have since separated.

The film sequences of the jungle done, as usual, at Ealing featured a wide profusion of wildlife specimens including a monitor lizard, a snake, a tropical bird and a full size Indian elephant named Monica. A few of the animals were also used for the studio recorded scenes - but not the elephant!

By far the most lavish set for this story was the main flight deck of the Ark - a large, hangar-like set featuring a giant scanner, a court-cum-address area and the flight consoles themselves. An important parameter Barry Newbery was asked to observe was the need to achieve a feeling of size. This he managed by the use of forced perspective backdrops, especially the one beyond the large, panoramic window to the rear of the flight deck set. The painted backdrops of the ship's fuselage dropped rapidly downwards to a low horizon point to give the illusion of enormous scale.

The flight deck scanner was a blank screen over which a picture from another camera could be imposed by the Inlay Operator. This effect had been used before (see 'The Chase') and was the only way this effect could be done prior to the invention and use of CGO.

The citadel of the Guardians, as seen from the jungle, was actually a piece of artwork, again by Barry Newbery.

As one zone of saving this serial featured no specially composed incidental music. For the fourth time in 'Doctor Who', the mood effects devised by Tristram Cary for 'The Daleks' (Serial "B") were used.

The inlaid split screen effect was used as well in episode one for the sequence where a criminal is reduced to microscopic size by the minifier cabinet. The inside of the cabinet prop, therefore, had to be black.

A stock slide of a computer memory storage bank was used to depict the Ark's vast cargo hold filled with rack upon rack of miniaturised humans.

The statue model was built to scale with a model of the Ark exterior showing the main airlock. This was a working model insofar as the outer door could be opened and shut to enable both the coffin of a Monoid and, later, the statue itself, to fall out in slow motion - done by fast cranking the camera. For control purposes all model shots were done on film.

The launcher transporters were represented in three sizes. The first were models to scale with the airlock to the Ark. These were seen leaving the Ark and flying towards a horizon painting of a planet. One full-size mock-up of a transporter was built into capsules with landing legs and had a hatchway which could split in two. The upper hatch folded upwards to form a canopy, the lower hatch dropped down to form a stairway. This full-size prop could be lifted into the air on wires. Also on wires were the medium-sized launchers which were seen dropping into the jungle background of Refusis to simulate the sight of many shuttle crafts landing over a wide area of the planet's surface.

One very ingenious model was the burning Earth. A globe of the Earth was hollowed out and filled with dry ice. Apertures were set into its circumference and, with a light breeze blowing over its surface, it gave the impression of the planet swirling away to destruction - a shot which was seen towards the end of episode two.

The kitchen scenes in episodes three and four featured several sequences where pills were dropped into bowls of water, the bowl's contents then turning into sumptuous meals. This was simply done by superimposing two images together - one of an empty bowl, one with a full bowl of vegetables, fruit, etc.

A slide caption was shown to depict the dwelling of the Refusian who later went aboard the Ark.

The Refusians were supposedly invisible. Hidden wires were thus used to indicate the creature's movements. One, fitted underneath his chair, was pulled downwards to give an impression of the Refusian sitting down. Other wires rustled bushes and moved chairs.

The decor favoured by the Refusians was a curious mixture of the stark and the artistic - walled buttresses contrasting sharply with elegant murals and other artifacts indicating a high civilisation.

The transporter car used inside the Ark, seen mostly during the first two episodes, was a converted electric tractor of the kind seen on railway stations. A few extra panels and props made it look suitably futuristic.

One novelty of the story was the Time-scale adopted by the Guardians. To signify just how far in the future this story was set the years were referred to not in years but in segments. As was discussed Nero, the Trojans and the era of the Daleks occurred in the 1st Segment of Time. 10,000,000 years on from there was the 57th Segment of Time, whereupon the Earth would perish. The first half of the story is set 700 years from landfall on Refusis.

CHRIS D'OYLY JOHN
FILM CAMERAMAN.....TONY LEGGO
FILM EDITOR.....NOEL CHANAN
LIGHTING.....HOWARD KING
SOUND.....RAY ANGEL
COSTUME SUPERVISOR.....DAPHNE DARE
MAKE-UP SUPERVISOR.....SONIA MARKHAM
INCIDENTAL MUSIC.....TRISTRAM CARY
STORY EDITOR.....GERRY DAVIS
DESIGNER.....BARRY NEWBERY
PRODUCER.....JOHN WILES
DIRECTOR.....MICHAEL IMISON